FOR QUALITY EXCELLENCE IN HIGHER EDUCATION
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JNANA BHARATHI
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BUB/CTE/2015-16/

Date: 03-11-2015

1. TEST REPORT ON REINFORCEMENT STEEL:

Sub: Testing of Reinforcement Steel of diameter 10 & 12mm.
{Project*: Improvements to Roads and Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. AEE/BSD/BBMP/ /2015-16, dated 29-10-2015

Sample supplied to lab by : Assistant Executive Engineer
Byatarayanapura Sub-Division,
BBMP, Bangalore.

Name of the Contractor*: Sri. B.Venugopal Reddy, BSR Construction, Bangalore-64.

TABLE – 1

SL No	Details	For 10mm		For 12mm	
		Test Results	Min Req as per IS 1786-2008	**Test Results**	Min Req as per IS 1786-2008
01	Observed diameter of bar	**10.0mm**	10.0mm	**12.0mm**	12.0mm
02	Observed Wt/m Length **Kg/m**	**0.624**	0.567	**0.894**	0.834
03	Proof stress/Yield stress, fy , **N/mm^2**	**556.0**	500.0	**560.0**	500.0
04	Bend/ Re bend Test	**Ok**	---	**Ok**	---
05	Percentage of Elongation, %	**19.70**	12.00	**20.40**	12.00
06	Ultimate Tensile Strength **N/mm^2**	**638.0**	545.0	**626.0**	545.0

*As furnished by Client.
The Results relate only to the items tested.

AE-05
n/a
3/11

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JNANA BHARATHI
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BUB/CTE/2015-16/ **Date: 13-11-2015**

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes for 07 days Compressive Strength
{Project*: Improvements to Roads and Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. AEE/BSD/BBMP/ /2015-16, dated 13-11-2015

Sample supplied to lab by : Assistant Executive Engineer
Byatarayanapura Sub-Division,
BBMP, Bangalore.

Name of the Contractor*: Sri. B.Venugopal Reddy, BSR Construction, Bangalore-64.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in Mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	06-11-15	13-11-15	07	22500	400	17.77	**17.55**
	002	"	"	"	"	385	17.11	
	003	"	"	"	"	400	17.77	

* As furnished by Client.
The Results relate only to the items tested.

AE-05 n/a

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BUB/CTE/2015-16/ **Date: 03-11-2015**

1. TESTING OF FINE & COARSE AGGREGATES:

Sub: Testing of Fine & Coarse Aggregates to be used for M-10 Concrete.
{Project*: Improvements to Roads and Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. AEE/BSD/BBMP/ /2015-16, dated 29-10-2015

Sample supplied to lab by : Assistant Executive Engineer
Byatarayanapura Sub-Division,
BBMP, Bangalore.

Name of the Contractor*: Sri. B.Venugopal Reddy, BSR Construction, Bangalore-64.

TABLE - 1.1 : SIEVE ANALYSIS : FINE AGGREGATE

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	97.20	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	86.00	60-95	75-100	85-100	
01.18	74.00	30-70	55-90	75-100	
600. mic	48.000	15-34	35-59	60-79	
300.mic	16.20	5-20	8-30	12-40	
150.mic	3.00	0-10	0-10	0-10	

Table - 1.1 : SIEVE ANALYSIS : 40 MM COARSE AGGREGATE

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
	40 mm Sample	*Single size*	*Graded*
40mm	98.00	85-100	95 – 100
20mm	36.00	0 -20	30- 70
10mm	17.50	0 -5	10- 35
4.75mm	Nil	------	0 - 5

*As Furnished by Client.

The Results relate only to the items tested

AE-05 n/a

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BUB/CTE/2015-16/ **Date: 07-11-2015**

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Improvements to Roads and Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. AEE/BSD/BBMP/ /2015-16, dated 29-10-2015

Sample supplied to lab by : Assistant Executive Engineer
Byatarayanapura Sub-Division,
BBMP, Bangalore.

Name of the Contractor*: Sri. B.Venugopal Reddy, BSR Construction, Bangalore-64.

PHYSICAL TESTS ON CEMENT

Brand* : Birla
Grade * : 53
Type * : OPC
Date : 30-10-2015 to 06-11-2015

SL No	Name of Test	Results	Requirements as per
		Cement Sample	IS 12269-1987
1	Initial setting time	**150 min**	Shall not be less than 30 min
2	Final setting time	**255 min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**2.50%**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**1.60 mm**	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results) b) 7 days (average of three results)	**29.30 N/ Sq mm** **41.00 N/Sq mm**	Shall not be less than 27 N/Sqmm Shall not be less than 37N/Sqmm

*As Furnished by Client.

The Results relate only to the items tested.

AE-05 n/a

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BUB/CTE/2015-16/ Date: 17-11-2015

TEST REPORT ON WET MIX MACADAM MIX
(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Improvements to Roads and Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. AEE/BSD/BBMP/ /2015-16, dated 16-11-2015

Sample supplied to lab by : Assistant Executive Engineer
Byatarayanapura Sub-Division,
BBMP, Bangalore.

Name of the Contractor*: Sri. B.Venugopal Reddy, BSR Construction, Bangalore-64.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, IV Revision-2001
53.00	**100.00**	100
45.00	**97.00**	95-100
26.50	**---**	-
22.40	**73.00**	60-80
11.20	**48.00**	40-60
4.75	**35.00**	25-40
2.36	**25.40**	15-30
0.600	**18.50**	8-22
0.075	**6.00**	0-8

*As furnished by Client.

The Results relate only to the items tested.

AE-05 n/a

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BUB/CTE/2015-16/ **Date: 20-11-2015**

TEST REPORT ON BITUMINOUS MIXES
(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: Testing of Bitumen Premix Sample (Semi Dense Bituminous Concrete-SDBC).
{Project*: Improvements to Roads and Drains at Kogilu Layout in Ward No.05, Byatarayanapura Sub-Division}

Ref.: Letter No. AEE/BSD/BBMP/ /2015-16, dated 19-11-2015

Sample supplied to lab by : Assistant Executive Engineer
Byatarayanapura Sub-Division,
BBMP, Bangalore.

Name of the Contractor*: Sri. B.Venugopal Reddy, BSR Construction, Bangalore-64.

TEST RESULTS:

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.08%**
2. **Gradation Test** :

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-15 of MORTH Specifications-2001 (Grading – 2)
13.2	**100**	100
9.5	**95.60**	90—100
4.75	**43.50**	35—51
2.36	**31.80**	24—39
1.18	**21.60**	15—30
0.3	**16.00**	09—19
0.075	**5.70**	03—08

* As furnished by Client.
The Results relate only to the items tested.

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